

Amendments to the Claims:

Claims 83 and 91 have been amended. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. - 69. (Canceled)

70. (Previously Presented) A method of load balancing among host servers of a data network, the method comprising:

storing, in a load balancing switch of the data network, round trip time data, wherein the round trip time data is a time for exchanging at least one message between a first host server site switch of the data network and a first client machine of the data network; and

ordering, in the load balancing switch, a plurality of network addresses, the network addresses being responsive to a query regarding a domain name, wherein the load balancing switch is capable of ordering the plurality of network addresses based, at least in part, on the round trip time data.

71. (Previously Presented) The method of claim 70, further comprising: creating a table, in the load balancing switch, using the round trip time data.

72. (Previously Presented) The method of claim 71, wherein the table is indexed by network neighborhood.

73. (Previously Presented) The method of claim 70, further comprising: sending a health check message to each of the plurality of network addresses from the load balancing switch.

74. (Previously Presented) The method of claim 73, wherein the health check is a layer 7 health check.

75. (Previously Presented) The method of claim 74, wherein the layer 7 health check uses a HTTP protocol or a FTP protocol.

76. (Previously Presented) The method of claim 73, wherein the health check is a layer 4 health check.

77. (Previously Presented) The method of claim 76, wherein the health check is a TCP or UDP health check.

78. (Previously Presented) The method of claim 70, wherein the first host server site switch is one of a plurality of host server site switches of the data network, and the first client machine is one of a plurality of client machines of the data network, and further comprising:

storing, in the load balancing switch, round trip time data received from each of the plurality of host server site switches, wherein each said round trip time data is a time for exchanging at least one message between a respective one of the host server site switches and a respective one of the plurality of client machines.

79. (Previously Presented) The method of claim 78, further comprising:
aggregating, at the load balancing switch, the round trip time data received from the plurality of host server site switches into a table.

80. (Previously Presented) The method of claim 79, wherein the table is indexed by network neighborhood.

81. (Previously Presented) The method of claim 78, wherein the time for exchanging messages between the respective host server site switch and the respective client machine is a time difference between the receipt, at the respective host server site switch, of a connection request message and a connection acknowledgement message from the respective client machine.

82. (Previously Presented) The method of claim 81, wherein the connection request message and the connection acknowledgment message comprise a TCP SYN packet and an associated TCP ACK packet, respectively.

83. (Currently Amended) ~~the~~ The method of claim 78, wherein the query originated at the first client machine; and further comprising:

ordering, in the load balancing switch, the network addresses from a first said network address to a last said network address, wherein the first said network address is associated with the one of the plurality of host server site switches having a lowest round trip time with the first client machine.

84. (Previously Presented) The method of claim 83, wherein among the ordered network addresses a second said network address is associated with the one of the plurality of host server site switches having a next-to-lowest round trip time with the first client machine.

85. (Previously Presented) The method of claim 70, wherein the time for exchanging messages between the first host server site switch and the first client machine is a time difference between the receipt, at the first host server site switch, of a connection request message and a connection acknowledgement message from the first client machine.

86. (Previously Presented) A method of load balancing among host servers of a data network, the method comprising:

receiving, at a load balancing switch of the data network, a query regarding a domain name; and

selecting, from a plurality of network addresses responsive to the request, a best network address based, at least in part, on which of the plurality of network addresses has been least recently selected by the load balancing switch as a best network address in response to previous queries.

87. (Previously Presented) The method of claim 86, further comprising:

storing, at the load balancing switch, round trip time data, wherein each said round trip time data is a time for exchanging at least one message between a respective one of a plurality of host server site switches of the data network and a respective one of a plurality of client machines of the data network

88. (Previously Presented) The method of claim 87, wherein the time for exchanging messages between the respective host server site switch and the respective client machine is a time difference between the receipt, at the respective host server site switch, of a connection request message and a connection acknowledgement message from the respective client machine.

89. (Previously Presented) The method of claim 87, further comprising:
creating, in the load balancing switch based on the round trip time data, a proximity table.

90. (Previously Presented) The method of claim 86, further comprising:
creating, in the load balancing switch, a proximity table.

91. (Currently Amended) A load balancing switch for load balancing amongst a plurality of host servers of a data network, the load balancing switch comprising:

a means for storing round trip time data received from a ~~plurality~~ plurality of host server site switches, each said round trip time data being a time for exchanging at least one message between a respective one of said host server site switches and a respective one of a plurality of client machines of the data network;

a means for receiving a query regarding a domain name, the query originating at a client machine of the data network; and

a means for ordering a plurality of network addresses that are responsive to the query based, at least in part, on stored round trip time data for the query-originating client machine.

92. (Previously Presented) The load balancing switch of claim 91, further comprising:

a means for ordering the plurality of network addresses based, at least in part, on which of the network addresses has been least recently selected as a best network address in response to previous queries.

93. (Previously Presented) The load balancing switch of claim 91, further comprising:

a means for ordering the plurality of network addresses based, at least in part, on a session capacity of the plurality of host server site switches.

94. (Previously Presented) The load balancing switch of claim 91, further comprising:

a means for ordering the plurality of network addresses based, at least in part, on an available session capacity of the plurality of host server site switches, wherein the available session capacity is a percentage of a session capacity of the respective host server site switch.

95. (Previously Presented) The load balancing switch of claim 91, further comprising:

a means for ordering the plurality of network addresses based, at least in part, on a health of the host servers.

96. (Previously Presented) A load balancing switch for load balancing amongst a plurality of host servers of a data network, the load balancing switch comprising:

a means for receiving a query regarding a domain name; and

a means for ordering a plurality of network addresses that are responsive to the query, based, at least in part, on which of the network addresses has been least recently selected as a best network address in response to previous queries.

97. (Previously Presented) The load balancing switch of claim 96, further comprising:

a means for ordering the plurality of network addresses based, at least in part, on a session capacity of a plurality of host server site switches, each said host server site switch being coupled between the load balancing switch and at least one of the host servers.

98. (Previously Presented) The load balancing switch of claim 96, further comprising:

a means for ordering the plurality of network addresses based, at least in part, on an available session capacity of a plurality of host server site switches, each said host server site switch being coupled between the load balancing switch and at least one of the host servers, wherein the available session capacity is a percentage of a session capacity of the respective host server site switch.

99. (Previously Presented) The load balancing switch of claim 96, further comprising :

a means for ordering the plurality of network addresses based, at least in part, on a health of the host servers.

100. (Previously Presented) A data networking method comprising:
storing, in a host server site switch through which a plurality of host servers of a data network are accessed, round trip time data, the round trip time data being a time for exchanging at least one message between the host server site switch and a client machine of the data network; and

communicating the round trip time data to a load balancing switch of the data network.

101. (Previously Presented) The data networking method of claim 100, further comprising communicating a number of sessions of the host server site switch to the load balancing switch.

102. (Canceled)